

AMENDMENTS TO THE CLAIMS

CLAIMS 1-48 (CANCELED).

CLAIM 49 (NEW): A method of detecting a direction of rotation of a plurality of sprockets mounted together on a sprocket mounting sleeve that is rotatably supported relative to an axle so that the sprocket mounting sleeve and the plurality of sprockets together rotate relative to the axle around a common axis, wherein the method comprises the steps of:

rotating a first sensor element together with the sprocket mounting sleeve and the plurality of sprockets;

disposing a second sensor element on the bicycle so that the first sensor element rotates relative to the second sensor element;

wherein one of the first sensor element and the second sensor element comprises:

a first sensor unit for communicating with the other one of the first sensor element and the second sensor element; and

a second sensor unit for communicating with the other one of the first sensor element and the second sensor element;

wherein the first sensor unit is offset from the second sensor unit in a circumferential direction;

detecting, by the first sensor unit and the second sensor unit, passage of the other one of the first sensor element and the second sensor element by the first sensor unit and the second sensor unit; and

determining a direction of rotation of the plurality of sprockets based on when the other one of the first sensor element and the second sensor element passes by the first sensor unit and the second sensor unit.

CLAIM 50 (NEW): The method according to claim 49 wherein the first sensor element comprises a signal generating element, wherein the first sensor unit comprises a first signal receiving element, and wherein the second sensor unit comprises a second signal receiving element.

CLAIM 51 (NEW): The method according to claim 50 wherein the signal generating element comprises a magnet.

CLAIM 52 (NEW): The method according to claim 49 wherein the second sensor element comprises the first sensor unit and the second sensor unit.

CLAIM 53 (NEW): The method according to claim 52 wherein the step of disposing the second sensor element on the bicycle comprises the step of disposing the second sensor element on a rear derailleur.

CLAIM 54 (NEW): A method of detecting a speed of rotation of a plurality of sprockets mounted together on a sprocket mounting sleeve that is rotatably supported relative to an axle so that the sprocket mounting sleeve and the plurality of sprockets together rotate relative to the axle around a common axis, wherein the method comprises the steps of:

- rotating a first sensor element together with the sprocket mounting sleeve and the plurality of sprockets;

- disposing a second sensor element on the bicycle so that the first sensor element rotates relative to the second sensor element;

- wherein one of the first sensor element and the second sensor element comprises:

- a first sensor unit for communicating with the other one of the first sensor element and the second sensor element; and

- a second sensor unit for communicating with the other one of the first sensor element and the second sensor element;

- wherein the first sensor unit is offset from the second sensor unit in a circumferential direction;

- detecting, by the first sensor unit and the second sensor unit, passage of the other one of the first sensor element and the second sensor element by the first sensor unit and the second sensor unit; and

- determining a speed of rotation of the plurality of sprockets based on when the other one of the first sensor element and the second sensor element passes by the first sensor unit and the second sensor unit.

CLAIM 55 (NEW): The method according to claim 54 wherein the first sensor element comprises a signal generating element, wherein the first sensor unit comprises a first signal receiving element, and wherein the second sensor unit comprises a second signal receiving element.

CLAIM 56 (NEW): The method according to claim 55 wherein the signal generating element comprises a magnet.

CLAIM 57 (NEW): The method according to claim 54 wherein the second sensor element comprises the first sensor unit and the second sensor unit.

CLAIM 58 (NEW): The method according to claim 57 wherein the step of disposing the second sensor element on the bicycle comprises the step of disposing the second sensor element on a rear derailleur.